

# 4 Port HD/SD-SDI Splitter with Reclocking

# User's Guide



Models
SPLIT-HDSDI-4-RS











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## **Section 1: Getting Started**

## 1.1 Important Safeguards

Please read all of these instructions carefully before you use the device. Save this manual for future reference.

#### What the warranty does not cover

- Any product, on which the serial number has been defaced, modified or removed.
- Damage, deterioration or malfunction resulting from:
  - Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
  - Repair or attempted repair by anyone not authorized by us.
  - Any damage of the product due to shipment.
  - Removal or installation of the product.
  - Causes external to the product, such as electric power fluctuation or failure.
  - Use of supplies or parts not meeting our specifications.
  - Normal wear and tear.
  - Any other causes which does not relate to a product defect.
- Removal, installation, and set-up service charges.

## 1.2 Safety Instructions

The SPLIT-HDSDI-4-RS, 4 Port HD/SD-SDI splitter with reclocking has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the SPLIT-HDSDI-4-RS should be used with care. Read the following safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

- Do not dismantle the housing or modify the module.
- Dismantling the housing or modifying the module may result in electrical shock or burn.
- Refer all servicing to qualified service personnel.
- Do not attempt to service this product yourself as opening or removing housing may expose you to dangerous voltage or other hazards
- Keep the module away from liquids.
- Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on to the housing, unplug the module immediately.
- Have the module checked by a qualified service engineer before using it again.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.

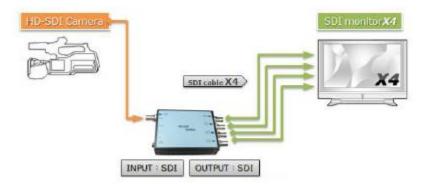
## 1.3 Regulatory Notices Federal Communications Commission (FCC)

This equipment has been tested and found to comply with Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

Any changes or modifications made to this equipment may void the user's authority to operate this equipment.

#### 1.4 Introduction

The Avenview SPLIT-HDSDI-4-RS receives one SDI input, perfectly duplicates it, and re-transmits four SDI outputs for real time multi-viewing. It is a reliable video device splitting a SDI or HD-SDI video source to four HD-SDI or SD-SDI displays at the same time.



#### 1.5 Features

- HD/SD dual-rate distribution
- Four separately buffered outputs
- HD cable equalization (Beldon 1694A)
- Dual color LED indication of input lock and rate
- Pass all ancillary data
- Provides automatic input cable equalization up to 300m (1000ft)
- Inter-locked power supply for better fixedness
- Reclocking SDI signals for cascading and longer transmission

## 1.6 Package Contents

Before you start the installation of the converter, please check the package contents.

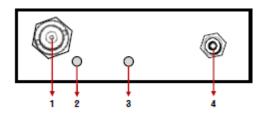
- SPLIT-HDSDI-4-RS x 1
- Power Adapter (+5VDC) x1
- User's Manual x1

## 1.7 Before Installation

- Put the product in an even and stable location. If the product falls down or drops, it may cause an injury or malfunction.
- Don't place the product in too high temperature (over 50°C), too low temperature (under 0°C) or high humidity.
- Use the DC power adapter with correct specifications. If inappropriate power supply is used then it may cause a fire.
- Do not twist or pull by force ends of the optical cable. It can cause malfunction.

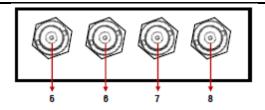
## 1.8 Panel Description

#### **FRONT PANEL**



1. HD/SD-SDI Input	2. LED – Reserved
3. LED – Power Indicator	4. 5V DC Power Jack

#### **REAR PANEL**



5. HD/SD-SDI Output 1	6. HD/SD-SDI Output 2
7. HD/SD-SDI Output 3	8. HD/SD-SDI Output 4

#### **Bottom Panel**



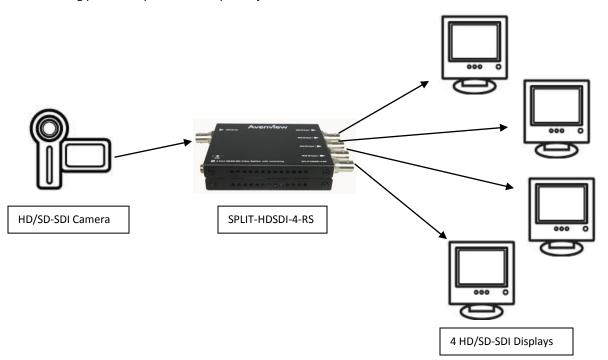
PIN 1 - OFF	PIN 2 - OFF	Auto rate detect (143 Mbps rate operation supported only in ARD mode)
PIN 1 - OFF	PIN 2 - ON	270 Mbps
PIN 1 - ON	PIN 2 - OFF	1483 / 1485 Mbps
PIN:	3 - OFF	Automatically reclocks bypassed SDI signals
PIN	3 - ON	For to bypass SDI signal
PIN 4	4 - OFF	Default Operation mode



## **Section 2: Installation**

Follow these instructions for installation of SPLIT-HDSDI-4-RS:

- 1. Ensure SPLIT-HDSDI-4-RS and all other source devices are turned off
- 2. Connect a camera or other HD/SD-SDI device to Input of SPLIT-HDSDI-4-RS
- 3. Connect devices equipped with HD/SD-SDI inputs (e.g. monitors or video processors) to SPLIT-HDSDI-4-RS outputs
- 4. Turn ON all devices connected to output of SPLIT-HDSDI-4-RS
- 5. Plug power adapter to 5V DC power jack of SPLIT-HDSDI-4-RS



## **Section 3: Specifications**

Item	Description
	•
Model	SPLIT-HDSDI-4-RS
SDI Standards	SD-SDI & HD-SDI
Auto HD/SD-SDI Detection	Yes
Supported Protocols	SMPTE 259M, SMPTE 292M / HDTV (1.485Gbps and 1.485/1.001Gbps)
Video Bandwidth	[1.485Gpbs & 1.485/1.001Gbps]
Data Rates	270 / 1483 / 1485 Mbps
Supported Video	[HD] 720p50/59.94/60, 1035i50/59.94/60, 1080i50/59.94/60, 1080p24/30 [SD] NTSC@59.94Hz, PAL@50Hz
SDI signal type	SMPTE-292M, SMPTE-259M
Output impedance	75Ω
Reclocking function	Yes
Cable equalization	[HD-SDI] up to 150m (500ft) / [SD-SDI] up to 300m (1000ft)
Audio support	Yes
RP-918 pathological patterns	Immune
Input Connectors	1x BNC [SDI]
Output Connectors	4x BNC [SDI]
BNC connector	75 $\Omega$ inter-locked socket
	Amplitude: Within 800mV ±3% (<10%)
	Rise overshoot: Less than 2% (<10%)
Eye pattern characteristics	Fall overshoot: Less than 2% (<10%)
	Long time jitter: $0.195\mu$ (<1.0 $\mu$ )
	Timing jitter: 0.195μ (<1.0μ) Alignment jitter: 0.127μ (<0.2μ)
Dimensions	5.7" x 3.2" x 1" (L x W x H)
Weight	305g
Power Supply	5V 4A DC
Power Consumption	10 Watts (max)
Operating Temperature	0~40°C [32~104°F]
Storage Temperature	-20~60°C [-4~140°F]
Relative Humidity	20~90% RH [no condensation]



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